

**HIT Standards Committee – Implementation Workgroup**  
**Hearing on Implementation Starter Kit: Lessons & Resources to Accelerate Adoption**

**Testimony of Michael G. Valentine, Chief Operating Officer**  
**Cerner Corporation / Kansas City, MO**  
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My name is Mike Valentine, and I am the executive vice president and chief operating officer at Cerner Corporation, in Kansas City, Mo., where I have been an associate for nearly 12 years. For much of my Cerner career, I have owned all of the client relationships in the U.S. and the centralized service and delivery functions at our world headquarters. In my current role, I have responsibility for all sales, consulting, technology, solution direction and support for Cerner's worldwide operations that serve clients in 25 countries.

On behalf of Cerner, I would like to thank the HIT Standards Committee Implementation Workgroup for the opportunity to provide testimony about our experiences with accelerating adoption and implementation of electronic health record systems.

Cerner is transforming healthcare by reducing error, variance and waste for healthcare providers and consumers around the world. *Cerner* solutions optimize processes for healthcare organizations ranging in size from single-physician practices to hospitals like Truman Medical Center, from health systems to entire countries and for pharma, medical device industries and the healthcare commerce system. These solutions are licensed by more than 8,500 facilities around the world, including approximately 2,300 hospitals; 3,400 physician practices covering more than 30,000 physicians; 600 ambulatory facilities, such as laboratories, clinics, cardiac facilities, radiology clinics and surgery centers; 700 home-health facilities; and 1,500 retail pharmacies. As such, Cerner provides HIT solutions to nearly one-third of the domestic healthcare market.

In 1979, Cerner began with the development of an information system that optimized processes in the hospital laboratory. It has since expanded the application of healthcare information systems across the entire healthcare delivery continuum. Today, *Cerner's* healthcare solutions include, but are not limited to, radiology & PACS, pharmacy, intensive care, women's health, surgery, blood banks and information exchange. In the 30 years since its inception, Cerner has enjoyed numerous opportunities to partner with healthcare providers on their respective journeys to implement and use technology to provide safer, more efficient and higher quality healthcare. The successes we experience with our clients are the result of a shared commitment to a vision of what we can accomplish together to transform the healthcare delivery system.

**Q. Outline the tools that you are providing to your customers to facilitate their ability to demonstrate the Level 1 “meaningful use” criteria and receive the CMS incentive payments.**

*Cerner* solutions have not been designed to merely “check the box” for meaningful use requirements. Our solutions consist of a comprehensive set of functional capabilities, knowledge and content as well as operational dashboards to allow system optimization and reports that aggregate data for providers to deliver the best patient care, efficiently and safely. *Cerner* has many tools available already that allow clients to monitor, analyze and report on many aspects of system performance and utilization. To reduce the reporting burden and help clients achieve the requirements, *Cerner* intends to provide built-in reporting functionality with many of our solutions to deliver the necessary functional measures specific to meaningful use.

In addition to functional reporting, Stage 1 meaningful use calls for the ability to capture, calculate and report clinical quality measures across both the acute and ambulatory venues. *Cerner*, in partnership with our clients have been leaders in innovating ways to capture quality measures as a byproduct of clinician workflows in the electronic health record (EHR) and use this data to proactively manage care towards evidence based pathways that lead to better outcomes.

*Cerner* partners and clients are recognized in the industry as thought leaders and innovators in their use of *Cerner* solutions and executable knowledge to achieve better outcomes. In 2008, University of Missouri Health Care was nationally recognized for their quality reporting outcomes with *Cerner* by receiving the prestigious CHIME Collaboration Award. Together *Cerner* and MU developed condition summaries that provide concise, pertinent information about the patient’s condition, embedded algorithms that provide guidelines for management of specific problems related to the care of a condition, and performance dashboards that enable individual physicians and practices to view their success in managing a condition and identify individuals who fall outside one or more of the quality criteria.

*Cerner* has been a qualified Physician Quality Reporting Initiative (PQRI) registry since 2008 and is qualified for registry based measures for 2010. Furthermore, we have embedded these quality measures directly in the clinical workflow utilizing our integrated EHR solutions. *Cerner* has been equally focused on delivering content and solutions that enable the capture, proactive management and reporting of National Hospital Quality Measures (NHQM). *Cerner*’s guiding principles when developing content and solutions around clinical quality is to embed the capture of the data within the clinician EHR workflows and make it relevant to the care of the patient as close to real-time as possible to ensure better outcomes. *Cerner* has volunteered to participate in the Centers for Medicare and Medicaid’s (CMS) pilot program for direct submission of inpatient core measures. *Cerner* believes the proactive management and direct submission processes will play pivotal roles in redirecting resources from data abstraction and data aggregation towards activities directly impacting patient care and outcomes.

Capture and reporting of data only lays the foundation for achieving improved patient safety and quality of care. Utilizing that data to achieve and sustain clinical process optimization by identifying previously unidentified and unconnected relationships among processes and outcomes are where the true value

and ROI exists. Memorial Hermann Healthcare System received the 2009 National Quality Forum Award which recognizes “an exemplary healthcare organization that is achieving meaningful, sustainable quality improvement in healthcare.”<sup>1</sup> "Memorial Hermann has truly transformed its systems to create a culture of safety and transparency and stands as a model of coordinated, high-quality healthcare," said NQF president and CEO Janet Corrigan. (National Quality Forum, 2009)

Cerner's vision aligns with ARRA's intent to improve outcomes by harvesting clinical information and presenting it in the right context at the right time to the right person. This level of transparency will lead to enhanced evidence-based practices and improved outcomes.

**Q. In your role of supporting your customer, please expand on possible solutions and provide other solutions being used in your customer base.**

As I mentioned previously, Cerner has a very broad portfolio of healthcare IT solutions that span the healthcare continuum. It is not feasible to enumerate all of the possible ways a client might accomplish a meaningful use objective using *Cerner* solutions, but I can give a couple of examples that demonstrate the variety of methods clients may consider when planning their capability targets for each meaningful use objective.

In the health outcomes policy priority of *Engaging Patients and Families in Their Health Care*, one of the criteria is to provide patients with an electronic copy of their health information upon request. Using *Cerner* solutions, a client could record the request in *ProFile*®, Cerner's request of information tool, generate the electronic copy per the specifications in the interim final rules using our clinical reporting request tool, and burn to a CD or USB drive. Alternatively, the electronic copy of the record could be routed, for free, to Cerner's personal health record platform, soon to be available via [www.cerner.com](http://www.cerner.com). A third option for clients is to use a patient portal solution, like Cerner's *IQHealth*®, to make the electronic copy of the EHR available.

Another example would be the meaningful use criteria to check insurance eligibility and submit claims electronically to public and private payers. Our clients could use *Cerner* Revenue Cycle solutions in coordination with Cerner's EDI claims service, or they could use one or more interfaces from our large catalog of system interfaces to extract the necessary data from *Millennium* and accomplish the same transactions using another certified solution.

As the above examples demonstrate, there are often many ways clients plan on targeting a meaningful use capability. One thing we've noticed as we engage with our clients about meaningful use, is they often have a different perspective on how the meaningful use objective impacts their organization, and therefore, may approach accomplishing that capability with a different *Cerner* solution or set of solutions, through the use of a third party solution or other type of custom development.

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[http://www.qualityforum.org/News\\_And\\_Resources/Press\\_Releases/2009/National\\_Quality\\_Forum\\_Presents\\_Memorial\\_Hermann\\_Healthcare\\_System\\_With\\_2009\\_Nqf\\_National\\_Quality\\_Healthcare\\_Award.aspx](http://www.qualityforum.org/News_And_Resources/Press_Releases/2009/National_Quality_Forum_Presents_Memorial_Hermann_Healthcare_System_With_2009_Nqf_National_Quality_Healthcare_Award.aspx)

Cerner promotes and enables a culture of collaboration in order to glean best practices, share successes and challenges, and work together on new initiatives. Our clients represent a diverse cross-section not only on the healthcare continuum, but also on the spectrum of EHR implementations. There are many clients who have achieved significant milestones in their implementation journeys, and those clients readily share their experiences with Cerner, other clients and the industry. From hosting site visits, to presenting their experiences at events like HIMSS and the Cerner Health Conference, to sharing and collaborating virtually with Cerner associates and other clients on Cerner's online collaboration platform, *uCern™*, these shared stories and experiences are vital to our continued improvement in the delivery, implementation and use of these EHR systems. This portfolio of readily accessible client experiences residing within our client base has allowed Cerner to develop and enhance the necessary tools and techniques to assist clients in the adoption and implementation of these complex systems, resulting in higher quality and replicable positive outcomes.

For instance, Cerner's implementation methodology, *MethodM®*, provides a complete set of tools and best practice recommendations for clients on how to best implement *Cerner Millennium®*. Together with services offered through our Solution, Upgrade and Experience Centers, Cerner is able to offer speed-to-value by drawing on our more than 30 years of experience to streamline decisions and provide best practices for the building, testing, implementation and use of our healthcare solutions. Coupled with Cerner's hosting services, clients are able to focus their energies on transformation and process change requirements as we provide the technical knowledge and expertise to manage and maintain the systems our clients use. The effectiveness of these capabilities and tools are illustrated by the successful usage of complex EHR functional capability, like CPOE, across Cerner's client base; which, according to a 2009 KLAS report, has more hospitals live on CPOE than any other EHR vendor.

**Q. Describe your roadmap for moving from where you are today to having software that supports the Level 1 "meaningful use" criteria which is able to be certified.**

Further review of the Stage 1 meaningful use criteria has been validating for many of our clients because the criteria align with many capabilities they've already implemented, or will soon implement. By and large, Cerner believes the meaningful use criteria can already be accomplished with our portfolio of solutions as it is a path that we've been traveling with our clients for more than 30 years. Our current efforts around meaningful use are geared toward ensuring specific functionality maps to the certification standards outlined in the interim final rule. Cerner is committed to ensuring that every eligible client can count on our solutions and services to help them meet any or all of their Medicare and Medicaid meaningful use objectives. We've taken this commitment so far as to secure CCHIT's preliminary ARRA 2011 certification designation for 21 out of 24 hospital meaningful use criteria and 23 of 27 eligible professional criteria with our solutions. We recognize that the rules establishing the process for certification bodies has not been finalized; however, we felt this action was necessary to assuage some of the anxiety among our client base as to the appropriate version of software and subsequent release packages that would be required to meet meaningful use. Those criteria that we did

not test in January represent areas that we intend to review after the final rule and certification scripts for meaningful use are released.

Cerner has actively mapped our client base in terms of their ownership of the solutions necessary to accomplish all meaningful use objectives and the use of the appropriate release of software that we anticipate will be meaningful use certified. We are actively communicating the necessary software releases and service package numbers to our clients and are consulting with them as part of their upgrade process to inform them of our recommended strategies designed to lessen the burden of upgrading for meaningful use in a compressed timeframe if they are targeting 2011 as their first EHR payment year.

At a high level, our recommended strategy provides ample time for clients to perform the larger software upgrade before the final rule is published and final certification is achieved. This leaves a smaller portion of code to be installed incrementally once it becomes generally available following the final rules and certification. This incremental code only requires that clients install service packages for the impacted solutions and does not require an entire *Millennium* upgrade. This speeds the time to production use, after which the code is available, enabling our clients to start demonstrating meaningful use earlier.

Even though meaningful use requires providers to use their EHR system at a high level of performance, Cerner believes this continues to be the right approach and the time still exists for many providers to meet those criteria, demonstrate meaningful use and achieve their EHR incentives. If we assume the release of the final CMS and ONC rules on meaningful use happen somewhere in April or May, and the time for the final certification process rule is established and official certification bodies emerge in the July or August timeframe, we feel that we've done the appropriate amount of due diligence that we can still achieve certification and publish our software so that clients who want to target an early demonstration period within the 2011 EHR payment year can do so.

Another way we are ensuring our clients are prepared to meet meaningful use is by leveraging technology platforms that are widely used throughout our client network. For example, Cerner has demonstrated the power of its client network to deliver value for the "greater good" while connecting our clients to a public health interoperability framework that also facilitates the communication of reportable lab results and syndromic data to public health agencies. Cerner's Flu Pandemic Initiative, which kicked-off in October 2009, provides a secure, HIPAA-compliant, rapid detection network for the influenza virus. As a free service to all clients who opt to participate, Cerner installs a very lightweight service and works with clients to extract influenza lab test results and orders as well as influenza symptoms. The system then sends that data back to Cerner for aggregation and near real-time reporting to all Cerner clients, public health agencies, the Department of Health and Human Services and the Centers for Disease Control.

This platform has capabilities that extend beyond flu detection. It can be dynamically configured to extract other reportable labs and syndrome data per the standards outlined in the interim final rule.

Cerner then only needs to configure direct feeds to specific state and local public health agencies to assist our clients in complying with those public health-related meaningful use criteria.

To go a little deeper on how we assist clients with some of the other interoperability aspects of meaningful use, it's probably worth noting that Cerner has been enabling the electronic transfer of data between healthcare providers and third party systems for decades through the development of thousands of discrete system interfaces. The *Cerner* Hub solution automates the standard bi-directional exchange of a myriad of HL7 transactions across multiple provider systems. Our *Cerner* Hub solution is currently assisting approximately 15 health systems to automatically route electronic health information between their hospital EHR and 26 foreign ambulatory EHR systems.

Cerner's interoperability portfolio also includes standards-based health information exchange technology as well as a patient-controlled health record and management platform designed to facilitate a person's involvement in their health. To date, Cerner solutions for facilitating health information exchange are employed by seven different organizations, serving hundreds of providers and covering nearly 1.75 million patient-lives:

- Lewis and Clark Information Exchange
  - Connects providers in the states of Kansas, Missouri, Oklahoma, Iowa and Nebraska.
- Jacksonville Health Information Network
  - A CMS population network in Jacksonville, Florida.
- Secure Medical Records Transport Network – SMRTNET
  - A network that contains 60 percent of Oklahoma's health data.
- CareEntrust
  - The first employer-driven health information exchange. Founded by 25 Kansas City-based companies.
- Texas Health Passport
  - Provides each foster child with a personal health record that follows them through the system.
- LifeBridge Consumer Health Record
  - Provides an electronic personal health record for any person in the Northwest Baltimore region and links to LifeBridge's EHR system.
- Hemophilia Health Record Project
  - Provides a health management platform for University of Utah hemophilia patients.

**Q. What do you think is your greatest challenge, and why?**

The complexity of what needs to be done to accomplish the vision of transforming the healthcare delivery system is now at odds with having to capture EHR incentives, in some cases very large incentives, in a relatively short amount of time. To Cerner, meaningful use is not about using the technology, it is about achieving the benefits that the technology enables. We cannot afford to lose

focus on the meaningful part of meaningful use and allow these initiatives to become just technology projects that don't deliver the return on investment. The HIT provisions of ARRA represent an enormous opportunity to reform our healthcare system and capitalize on the potential HIT has in lowering the cost of healthcare while at the same time increasing the quality.

With that, there are two items included in the meaningful use recommendations that Cerner views as challenges. The first is the struggle to gain clarity around many of the rules in the interim final rule and Notice of Proposed Rule Making and continued management of the unknowns. This lack of clarity and the inherent timelines lead to the second challenge of helping our clients and the industry achieve the appropriate level of awareness and education to make the most informed decisions on how to proceed with the development or refinement of a roadmap that aligns with meaningful use requirements and allows them to pursue the most practical aggressive timeline to take full advantage of the incentive opportunity.

Cerner has taken a proactive stance on meaningful use since HITECH went into law in February of 2009, and we have engaged our clients in various dialogue and interactions on what the impact would be. Shortly after HITECH went into effect, Cerner worked with our clients to identify opportunities to receive the maximum amount of proposed financial incentives by aligning and, in some cases accelerating, their roadmaps. Cerner has had a focused team that has been conducting on-site meaningful use workshops that focus on education and establishing plans to achieve meaningful use by addressing the unknowns and ambiguities that have existed and still exist today.

In an effort to continually and aggressively educate our clients and enable them to make more informed decisions about how to achieve, sustain and manage meaningful use practices, we will be conducting a free meaningful use summit in May at our world headquarters campus.

While we will continue to prioritize Cerner's client base we recognize that there is a shortage of accessible consulting throughout the industry. For this reason Cerner is planning to offer a similar meaningful use summit to the broader industry. It will allow anyone who is in need of basic education to help kick-start their strategy development. We continue to operate in the face of many unknowns. Cerner has publicly commented on them, but we continue to reach out to our clients and to the industry to achieve the goals as laid out by the legislation and subsequent rules as best we understand them.

Again, I want to thank the committee for looking to Cerner to provide comments on the implementation of meaningful use practices. We believe that the recommended standards set forth by the committees will accelerate the adoption of healthcare technology, which will ultimately lead to a safer and more affordable health system.